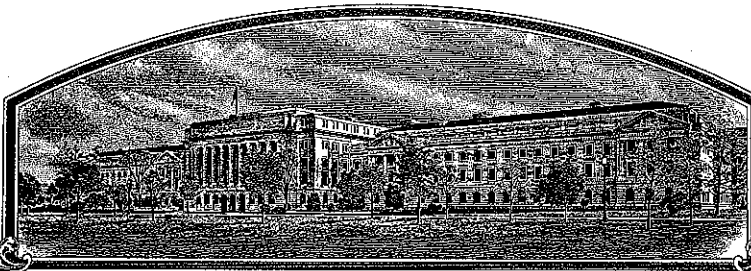


No.

200500112



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

California Planting Cotton Seed Distributors

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMERICAL GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Cobalt Pima'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fourteenth day of February, in the year two thousand and six.

Attest:


Commissioner
Plant Variety Protection Office
Agricultural Marketing Service


Secretary of Agriculture

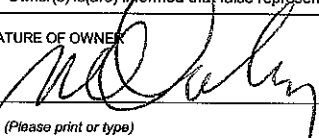


U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

| | | | | | |
|--|--|--|--|---|--|
| 1. NAME OF OWNER California Planting Cotton Seed Distributors | | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME E303 | | 3. VARIETY NAME Cobalt Pima | |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) PO Box 80357 Bakersfield, CA 93380.0357 | | 5. TELEPHONE (include area code) (661) 399-1400 | | FOR OFFICIAL USE ONLY PVPO NUMBER 2005 00112 | |
| | | 6. FAX (include area code) (661) 399-3169 | | | |
| 7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation | | 8. IF INCORPORATED, GIVE STATE OF INCORPORATION California | | 9. DATE OF INCORPORATION May 13, 1936 | |
| 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Stephen R. Oakley 30597 Jack Avenue Shafter, CA 93263 | | | | FILING AND EXAMINATION FEES: \$ 3,652.00 DATE 2/3/05 CERTIFICATION FEE: \$ 768.00 DATE 1/17/06 | |
| 11. TELEPHONE (include area code) (661) 746-3366 | | 12. FAX (include area code) (661) 746-6905 | | 13. E-MAIL sroakley@cpcsd.com | |
| 14. CROP KIND (Common Name) cotton | | 15. GENUS AND SPECIES NAME OF CROP Gossypium hirsutum L. | | 16. FAMILY NAME (Botanical) Malvaceae | |
| 17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | | 18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) | | 19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input checked="" type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input type="checkbox"/> NO (If "no", go to item 22) | |
| 20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED | | 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.) | | 22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) | |
| 23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) | | 24. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties. | | | |
| SIGNATURE OF OWNER  | | SIGNATURE OF OWNER | | | |
| NAME (Please print or type) Stephen R. Oakley | | NAME (Please print or type) | | | |
| CAPACITY OR TITLE Vice President, Director of R&D | | DATE 28 Jan 2005 | | CAPACITY OR TITLE | |
| | | | | DATE | |

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety - at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to **reproduce** the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705.

Telephone: (301) 504-8089. <http://www.ams.usda.gov/lsg/seed.htm>

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (02-10-2003) designed by the Plant Variety Protection Office with Word 2000. Replaces former versions of ST-470, which are obsolete.

Exhibit A. Origin and Breeding History - Cobalt Pima

Cobalt Pima is a variety of cotton developed from the cross OA304 x W402 made in 1993 at the CPCSD Cotton Research and Development Station, Shafter, California. The parents OA304 and W402 were developed for agronomic performance and adaptation to San Joaquin Valley soils. OA304 is owned by Olvey and Associates and has been assigned PVP number# 9500107. W402 is a breeding line owned by CPCSD was developed from SP9, a selection of Pima S-6 made in 1988 on Verticillium wilt infested soil in Tulare County, California. Pima S-6 was released by the United States Department of Agriculture, Agricultural Research Service, Maricopa, Arizona, Pima breeding program, and was developed from the cross 5934-23-2-6 x 5903-98-4-4. The background of these USDA Pima lines are detailed by Calhoun, D.S., D.T. Bowman, and O.L. May, 1994, Pedigree of Upland and Pima Cotton Cultivars Released Between 1970 and 1990, MAFES Bulletin 1017, Mississippi State University, MS 39762.

Details of Selection

Seed from the cross OA304 x W402 were planted in the 1994 CPCSD Pima nursery as an F₁ population and subsequently planted in 1995 and 1996 as an F₂ and F₃ rows, respectively. In 1997 the F₃ seed was planted as an F₄ population. A pedigree selection procedure (plant to row basis) followed as individual plants were selected on the basis of agronomic characteristics, yield potential, and fiber characteristics. This process continued until 1999 when F₇ seed from F₆ row W2251 was bulk harvested and entered into the 2000 CPCSD Pima testing program. The line W2251 was subsequently entered into the 2003 SJVCB Pima testing program as E303. In November 2004 E303 was renamed Cobalt Pima.

Variants and Stability

CPCSD Cobalt Pima is in its fifth season of evaluation, large scale testing and seed increase; no variants have been observed. In approximately thirty test locations the performance of Cobalt Pima has been uniform and stable.

Population Size for Selection

| Population | Approximate Number of Individuals |
|---------------------------------|-----------------------------------|
| F ₁ | 180 |
| F ₂ - F ₄ | 2000 |
| F ₅ - F ₆ | 60 |

Exhibit A. Origin and Breeding History - Cobalt Pima

| <u>Year</u> | <u>Event</u> | <u>Generation</u> |
|-------------|---|-------------------|
| 1993 | Cross: OA304 x W402 Pedigree: OA304 = PVP# 9500107 W402 = SP9 = Pima S-6 selection | |
| 1994 | Increased as F1-167 | F ₁ |
| 1995 | F1-167 planted as row W838 | F ₂ |
| 1996 | Row W838 planted as row W1300 | F ₃ |
| 1997 | Row W1300 planted as row W1540 | F ₄ |
| 1998 | Plant selection W1540-15 planted as row W1941 | F ₅ |
| 1999 | Plant selection W1941-10 planted as row W2251 and subsequently bulk harvested as a progeny row | F ₆ |
| 2000 | W2251 entered into first evaluation stage: CPCSD Lines Test | |
| 2001 | W2251 advanced into second evaluation stage: CPCSD Preliminary Strain Test | |
| 2002 | W2251 advanced into third evaluation stage: CPCSD Advanced Strain Test | |
| 2003 | W2251 entered into SJVCB Pima testing program as as E303. | |
| 2004 | E303 continued in SJVCB Pima testing program and named Cobalt Pima | |

Exhibit B. Statement of Distinctness - Cobalt Pima

The San Joaquin Valley (SJV) of California is a state regulated cotton district that requires Pima cotton varieties be evaluated by the San Joaquin Valley Cotton Board (SJVCB) in comparison with the SJV Pima Standard, Pima S-7. Cobalt Pima is most similar to Pima S-7.

The CPCSD Advanced Strain Test data from 2001, 2002 and 2003 are presented below for early foliar decline (EFD), seeds per boll, and percent lodged. These data show that Cobalt is a novel Pima cotton variety due to its lower EFD and percent lodging, and higher seeds per boll when compared to Pima S-7.

Table 1. CPCSD Advanced Strain Test Data

| Variety | 2001-03 EFD Rating | 2002-03 Seeds per Boll | 2003 Lodging Rating |
|-------------|--------------------------|------------------------------|---------------------------|
| | 1=green 10=brown | | % lodged |
| S-7 | 3.60 | 15.8 | 44.4 |
| Cobalt Pima | 2.07 | 17.7 | 9.9 |
| LSD.05 | 0.52 | 1.3 | 11.2 |
| CV% | 30.3 | 13.7 | 46.2 |

2005-00112

U.S. DEPARTMENT OF AGRICULTURE
PLANT VARIETY PROTECTION OFFICE, AMS, USDA
NATIONAL AGRICULTURAL LIBRARY Bldg., Rm. 400
10301 BALTIMORE Blvd.
BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
COTTON (*Gossypium* spp.)

| | | |
|--|--|--|
| NAME OF APPLICANT(S) California Planting Cotton Seed Distributors | TEMPORARY DESIGNATION E303 | VARIETY NAME Cobalt Pima |
| ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) PO Box 80357 Bakersfield, CA 93380-0357 | | FOR OFFICIAL USE ONLY PVPO NUMBER <div style="font-size: 1.5em; font-weight: bold;">2005 00112</div> |

Place the appropriate data that describes the varietal characteristic of this variety in the space provided. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characters marked with an asterisk * indicate necessary characters to be measured.

SPECIFIC VARIETIES USED FOR COMPARISON AS CHECK VARIETIES IN THIS APPLICATION: Use standard regional check varieties which are adapted to your area. One of the comparison varieties must be the most similar variety used in Exhibit B.

Variety 1. Pima S-7 Variety 2. _____ Variety 3. _____

*1. SPECIES:

_____ *G. hirsutum* L. X *G. barbadense* L.

*2. AREA(S) OF ADAPTATION: (A=Adapted, NA= Not Adapted, NT= Not Tested)

| | | | |
|------------------------------|---------------|---------------|----------------------|
| _____ Eastern | _____ Delta | _____ Central | _____ Blacklands |
| _____ Plains | _____ Western | _____ Arizona | <u>X</u> San Joaquin |
| _____ Other (Specify): _____ | | | |

3. GENERAL: Characteristics which are known to be variable but are still useful for a meaningful description of the variety.

| | Cobalt Application Variety | S-7 Comparison Variety 1 | Comparison Variety 2 | Comparison Variety 3 |
|--|--------------------------------------|------------------------------------|----------------------|----------------------|
| Plant Habit: Spreading, Intermediate, Compact | I | I | | |
| Foliage: Sparse, Intermediate, Dense | D | D | | |
| Stem Lodging: Lodging, Intermediate, Erect | E | E | | |
| Fruiting Branch: Clustered, Short, Normal | N | N | | |
| Growth: Determinate, Intermediate, Indeterminate | Intermed | Intermed | | |
| Leaf Color Greenish yellow, Light green, Medium green, Dark green | MG | MG | | |

3. GENERAL:

CobaltS-7

Boll Shape: Length LESS than
width, Length EQUAL to width,
Length MORE than width

MoreMore

Boll Breadth: Broadest at base,
Broadest at middle

BASEBASE

*4. MATURITY: (Days for 50% Open bolls from sequential harvest dates.)

Days for 50% Open Bolls

156161

5. PLANT:

Cm to 1st Fruiting Branch:

(from cotyledonary node)

21.824.3**No. of Nodes to 1st Fruiting****Branch:**

(excluding cotyledonary node)

6.17.1**Mature Plant Height cm:**

(from cotyledonary node to terminal)

88.986.4

*6. LEAF

Type: Normal Sub Okra, Okra,

Super Okra

NN**Pubescence:** Absent, Sparse, Medium,Dense OR Trichomes/cm2 (Bottom
surface excluding veins)MM**Nectaries:** Present or AbsentPP

*7. STEM PUBESCENCE:

Glabrous, Intermediate, Hairy

GG

*8. GLANDS: (Gossypol) Absent, Sparse, Normal, More Than Normal

Leaf:NN**Stem:**NN**Calyx Lobe:** (normal is absent)AA

*9. FLOWER

Petals: Cream, YellowYY**Pollen:** Cream, YellowYY**Petal Spot:** Present, AbsentPP

*10. SEED

Seed Index:

(g/100 seed, fuzzy basis)

13.113.3**Lint Index:**

(g lint/100 seeds)

7.37.5

2005 00112

*11. BOLL

| | Cobalt | S-7 | | |
|-------------------------------------|--------|------|--|--|
| Lint Percent: | | | | |
| <u>X</u> Picked | | | | |
| Pulled | 37.2 | 37.5 | | |
| OR | | | | |
| Gin Turnout: | | | | |
| <u>X</u> Picked | | | | |
| Stripped | 31.1 | 31.0 | | |
| Number of Seeds per Boll | 16 | 14 | | |
| Grams Seed per Boll | 3.4 | 3.5 | | |
| Number Locules per Boll | 3 | 3 | | |
| Boll Type: | | | | |
| (Stormproof, Storm Resistant, Open) | Open | Open | | |

12. FIBER PROPERTIES

Specify Method (HVI or other): Individual Instruments

| | | | | |
|-----------------------------------|-------|-------|--|--|
| * Length: (inches, 2.5% SL) | 1.378 | 1.390 | | |
| * Uniformity: (%) | 48.2 | 47.9 | | |
| * Strength, T1 (g/tex) stelometer | 35.1 | 35.5 | | |
| * Elongation, E1 (%) | 8.9 | 7.9 | | |
| * Micronaire: | 4.05 | 3.95 | | |
| Fineness (Source _____) | | | | |
| Yarn Tenacity: (cN/tex, 27 tex) | | | | |
| Yarn Strength (lbs. 22's) | 171 | 173 | | |

13. DISEASES: (NT=Not Tested, S= Susceptible, MS=Moderately Susceptible, MR=Moderately Resistant, R=Resistant)

| | |
|---|--|
| <u>NT</u> <i>Alternaria macrospora</i> | <u>S</u> Fusarium Wilt |
| <u>NT</u> Anthracnose | <u>NT</u> Phymatotrichum Root Rot |
| <u>NT</u> Ascochyta Blight | <u>NT</u> <i>Pythium</i> (specify species) |
| <u>NT</u> Bacterial Blight (Race 1) | <u>NT</u> <i>Rhizoctonia solani</i> |
| <u>NT</u> Bacterial Blight (Race 2) | <u>NT</u> Southwestern Cotton Rust |
| <u>NT</u> Bacterial Blight (Race _____) | <u>NT</u> Thielaviopsis basicola |
| <u>NT</u> Diplodia Boll Rot | <u>MR</u> Verticillium Wilt |
| <u>NT</u> Other (specify _____) | |

14. NEMATODES, INSECTS AND PESTS: (NT=Not tested, S=Susceptible, MS= Moderately Susceptible, MR=Moderately Resistant, R= Resistant

| | | | |
|-----------|----------------------------------|-----------|--------------------------------------|
| <u>NT</u> | Root-Knot Nematode | <u>NT</u> | Reniform Nematode |
| <u>NT</u> | Boll Weevil | <u>NT</u> | Grasshopper (specify species): |
| <u>NT</u> | Bollworm | <u>NT</u> | Lygus (specify species): |
| <u>NT</u> | Cotton Aphid | <u>NT</u> | Pink Bollworm |
| <u>NT</u> | Cotton Fleahopper | <u>NT</u> | Spider Mite (specify species): _____ |
| <u>NT</u> | Cotton Leafworm | <u>NT</u> | Stink Bug |
| <u>NT</u> | Cutworm (specify species): _____ | <u>NT</u> | Thrips (specify species): _____ |
| <u>NT</u> | Fall Armyworm | <u>NT</u> | Tobacco Bud Worm |
| <u>NT</u> | Other (specify): _____ | | |

15. COMMENTS: Present any additional information that cannot adequately be described in 1 through 13 which significantly distinguishes your variety.

Exhibit D. Additional Description of the Variety - Cobalt Pima

Table 2. 2003 CPCSD Advanced Strain Test - Five Locations

| Variety | Seed Cotton Yield (lbs/A) | Lint Yield Average (lbs/A) | Gin Turn Out (%) | 2.5% length (in) | Unif. index | T1 (g/tex) | E1 (%) | Mic | Yarn Str. (g/tex) | Adj. Plant Height (in) | Lint Percent (%) | Lint index (g) | Seed Index (g) | EFD Rating 1-green 10-brown | Boll weight (g) | Lint per boll (g) | Seeds per boll | Maturity Rating 1-early 10-late | Defol. Rating 1-early 10-late | Lodging Rating % lodged |
|-------------|------------------------------------|-------------------------------------|---------------------------|------------------------|----------------|---------------|-----------|------|-------------------------|---------------------------------|------------------------|----------------------|----------------------|--------------------------------------|-----------------------|----------------------------|----------------------|---------------------------------------|-------------------------------------|-------------------------------|
| S-7 | 3239 | 945 | 29.3 | 1.394 | 49.37 | 38.5 | 9.5 | 3.95 | 176 | 33.7 | 36.1 | 7.5 | 13.3 | 3.7 | 2.9 | 1.0 | 14.0 | 2.4 | 4.1 | 44.4 |
| Cobalt Pima | 3555 | 1056 | 30.3 | 1.379 | 49.35 | 37.9 | 9.9 | 4.05 | 173 | 35.3 | 35.9 | 7.3 | 13.1 | 2.1 | 3.2 | 1.2 | 16.0 | 2.5 | 5.3 | 9.9 |
| LSD.05 | 218 | 70 | 0.8 | 0.016 | 0.84 | 1.1 | 0.5 | 0.13 | 3 | 2.9 | 0.6 | 0.3 | 0.4 | 0.5 | 0.2 | 0.1 | 1.0 | 0.6 | 0.7 | 11.2 |
| CV% | 5.9 | 6.5 | 2.2 | 1.1 | 1.6 | 2.8 | 5.2 | 3.1 | 1.7 | 7.1 | 1.5 | 3.9 | 3.2 | 21.3 | 5.6 | 6.1 | 5 | 17.0 | 13.6 | 46.2 |

Table 3. 2002 CPCSD Advanced Strain Test - Six Locations

| Variety | Seed Cotton Yield (lbs/A) | Lint Yield Average (lbs/A) | Gin Turn Out (%) | 2.5% length (in) | Unif. index | T1 (g/tex) | E1 (%) | Mic | Yarn Str. (g/tex) | Adj. Plant Height (in) | Lint Percent (%) | Lint index (g) | Seed Index (g) | EFD Rating 1-green 10-brown | Boll weight (g) | Lint per boll (g) | Seeds per boll | Maturity Rating 1-early 10-late | Defol. Rating 1-early 10-late |
|-------------|------------------------------------|-------------------------------------|---------------------------|------------------------|----------------|---------------|-----------|------|-------------------------|---------------------------------|------------------------|----------------------|----------------------|--------------------------------------|-----------------------|----------------------------|----------------------|---------------------------------------|-------------------------------------|
| S-7 | 3985 | 1238 | 31.2 | 1.418 | 47.40 | 36.7 | 9.4 | 3.92 | 188 | 37.4 | 38.4 | 8.1 | 13.0 | 3.6 | 3.7 | 1.4 | 17.6 | 2.3 | 3.9 |
| Cobalt Pima | 4223 | 1283 | 30.6 | 1.436 | 48.50 | 36.1 | 9.6 | 3.89 | 183 | 38.0 | 37.3 | 7.7 | 13.0 | 2.3 | 4.0 | 1.5 | 19.4 | 2.8 | 2.4 |
| LSD.05 | 268 | 89 | 0.8 | 0.023 | 1.10 | 0.9 | 0.5 | 0.13 | 5 | 2.4 | 0.6 | 0.3 | 0.5 | 0.7 | 0.4 | 0.1 | 1.7 | 0.7 | 0.8 |
| CV% | 6.3 | 6.9 | 2.1 | 1.9 | 2.9 | 4.3 | 5.5 | 4.4 | 2.2 | 5.6 | 1.4 | 3.9 | 3.9 | 23.6 | 9.3 | 9.1 | 9.1 | 18.1 | 14.8 |

Table 4. 2001 CPCSD Preliminary Strain Test - Three Locations

| Variety | Seed Cotton Yield (lbs/A) | Lint Yield Average (lbs/A) | Gin Turn Out (%) | 2.5% length (in) | Unif. index | T1 (g/tex) | E1 (%) | Mic | Yarn Str. (g/tex) | Adj. Plant Height (in) | Lint Percent (%) | Lint index (g) | Seed Index (g) | EFD Rating 1-green 10-brown | Boll weight (g) | Lint per boll (g) |
|-------------|------------------------------------|-------------------------------------|---------------------------|------------------------|----------------|---------------|-----------|------|-------------------------|---------------------------------|------------------------|----------------------|----------------------|--------------------------------------|-----------------------|----------------------------|
| S-7 | 4347 | 1403 | 32.3 | 1.363 | 46.90 | 33.6 | 8.3 | 4.00 | 172 | 40.5 | 38.0 | 7.9 | 13.0 | 3.5 | 3.7 | 1.4 |
| Cobalt Pima | 4704 | 1501 | 31.9 | 1.339 | 46.70 | 34.8 | 8.4 | 4.19 | 173 | 40.0 | 37.5 | 7.7 | 12.8 | 1.8 | 3.6 | 1.3 |
| LSD.05 | 456 | 142 | 0.8 | 0.032 | 1.60 | 2.0 | 0.5 | 0.29 | 7 | 5.0 | 1.0 | 0.4 | 0.7 | 0.5 | 0.6 | 0.2 |
| CV% | 7.6 | 7.4 | 1.5 | 1.3 | 2.0 | 3.4 | 3.4 | 4.1 | 2.2 | 9.7 | 1.5 | 3.2 | 3.2 | 25.2 | 9.1 | 8.6 |

Table 5. 2000 CPCSD Lines Test - Two Locations

| Variety | Seed Cotton Yield (lbs/A) | Lint Yield Average (lbs/A) | Gin Turn Out (%) | 2.5% length (in) | Unif. index | T1 (g/tex) | E1 (%) | Mic | Yarn Str. (g/tex) |
|-------------|------------------------------------|-------------------------------------|---------------------------|------------------------|----------------|---------------|-----------|------|-------------------------|
| S-7 | 4338 | 1354 | 31.4 | 1.373 | 49.5 | 32.9 | 6.3 | 4.00 | 180 |
| Cobalt Pima | 4710 | 1425 | 30.3 | 1.358 | 51.2 | 30.5 | 7.4 | 3.75 | 178 |
| LSD.05 | 701 | 286 | 1.8 | 0.058 | 1.2 | 2.9 | 0.9 | 0.43 | 6 |
| CV% | | | | 2.49 | 3.1 | 5.3 | 9.9 | 6.91 | 3.7 |

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE**EXHIBIT E**
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

| | | |
|---|--|--|
| 1. NAME OF APPLICANT(S) California Planting Cotton Seed Distributors | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER E303 | 3. VARIETY NAME Cobalt Pima |
| 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) PO Box 80357 Bakersfield, CA 93380-0357 | 5. TELEPHONE (Include area code) (661) 399-1400 | 6. FAX (Include area code) (661) 399-3169 |
| 7. PVPO NUMBER | | 2005 00112 |

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

The applicant is the original breeder and current owner of the variety, thus an ownership trace is not necessary.

The variety was developed from germplasm and seedstocks owned by the applicant, by individuals employed by the applicant, at facilities owned by the applicant, or through contractual arrangements made by the applicant.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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